



INTEGRATED
WASTE
MANAGEMENT
BOARD

Revised No. 19 May 31, 1995
Publication Number 232-95-004

APPROVAL OF ALTERNATIVE DAILY COVER DEMONSTRATION PROJECTS USING GREEN MATERIAL AND OTHER WASTE DERIVED MATERIALS

To All Local Enforcement Agencies

Authority and Purpose

The California Integrated Waste Management Board (Board) has authority to consider application for alternative daily cover (ADC) under Title 14, California Code of Regulations (14 CCR), Division 7, Sections 17258.21(b) and 17682. Board staff are currently establishing performance criteria for ADC materials and will develop regulations specifying acceptable conditions for their use. Regulations are expected to be finalized in October 1995. In the interim, Board staff are reviewing proposed ADC use on a case-by-case basis pursuant to the Board's "Procedural Guidance for the Evaluation of Alternative Cover," adopted May 17, 1990. Based on past experience, a proposed ADC demonstration project that meets the guidelines set out below will be approved by Board staff. Therefore, if an ADC demonstration project complies with these guidelines, an LEA may approve this demonstration use without the need for further Board staff approval. If the guidelines are not followed, Board staff will still need to review the project on a case-by-case basis.

The purpose of this Local Enforcement Agency (LEA) Advisory is to establish a procedural change in approving projects for ADC using shredded green material. The procedural change gives the LEA the authority to approve or deny a proposed green material ADC demonstration project if the LEA implements the generic guidelines developed by Board staff in this advisory. This gives the LEA more control and flexibility over the handling of ADC projects. It eliminates unnecessary duplication of effort between LEA and Board staff. This procedure is not a change in the Board's "Procedural Guidance for the Evaluation of Alternative Cover" since the conditions were developed consistent with requirements specified in the guidance policy.

This LEA Advisory also implements the Board's recent determination concerning disposal reduction and ADC. On January 25, 1995, the Board adopted a motion (attached) that material used as ADC, as strictly limited and monitored by technical landfill-based performance standards, is determined to be diversion and can be counted towards the disposal reduction goals of AB 939 upon initiation of an approved demonstration project. If the demonstration project is not approved, jurisdictions may not claim disposal reduction for the material used in the demonstration project. The Board's motion also reiterated its intent to expand markets for green material processed into high quality, value-added compost products. Staff were directed to revise LEA Advisory No. 19 ("Streamlining the Approval

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Advisory notes are designed to guide and assist Local Enforcement Agencies and are not intended to supersede statute or regulation. All Local Enforcement Agency (LEA) representatives are encouraged to contact the LEA Branch at (916) 255-2287 to address a specific topic.

of Alternative Daily Cover Demonstration Projects Using Green Material") to limit use of green material ADC to a maximum thickness of 12 inches. This thickness has been determined to be functionally equivalent to soil. The thickness of other materials used as ADC such as biosolids, treated auto shredder residue, and treated oil-field wastes are to be determined on a case-by-case basis.

This LEA Advisory establishes the second streamlined approval procedure for ADC. LEA Advisory No. 10, dated March 7, 1994, established streamlined approval procedures for demonstration projects testing geosynthetic blankets.

New Thickness Restrictions Imposed for ADC Demonstration Projects

The following new conditions shall be satisfied. ADC using green material shall be restricted to a maximum thickness of 12 inches. This is a modification of condition (k) of LEA Advisory No. 19. ADC using waste derived materials other than green material shall be confined to the maximum functional thickness established as suitable cover on a case-by-case basis for the demonstration project.

Disposal Reduction Credit

Disposal reduction may apply to ADC only if ADC is applied as part of an approved demonstration project or applied in accordance with specific permit conditions. Landfill operators using ADC for waste disposal reduction must comply with the disposal reporting requirements of 14 CCR, Division 7, Chapter 9, Article 9.0. Disposal reduction may be counted from the commencement of ADC application as part of a demonstration project, provided that the demonstration project is judged successful. If a demonstration project fails, any previously granted disposal reduction is rescinded. LEAs are instructed to inform operators about these requirements.

Standard Approval Conditions for Shredded Green Material ADC Projects

As defined in 14 CCR, Division 7, Chapter 3.1, Section 17852(u), "green material" means any plant material that is either separated at the point of generation, or separated at a centralized facility that employs methods to minimize contamination. Green material includes, but is not limited to, yard trimmings, plant wastes from the food processing industry, manure, untreated wood waste, paper products, and natural fiber products. Green material does not include treated wood waste, mixed demolition or mixed construction debris. Shredded green material refers to green material that has been ground using conventional shredding and grinding equipment to an approximate average particle size of four inches and smaller.

The following generic conditions apply to shredded green material ADC demonstration projects which preclude plant wastes from the food processing industry, manure, and paper products. Shredded green material used as ADC may also include varying proportions of chipped wood waste from urban sources. These generic conditions shall be satisfied for the LEA to approve the projects without a separate case-by-case Board approval [*brackets with italics indicate further clarification and conditions that are recommended but not required*]:

- (a) The Local Enforcement Agency (LEA), or its agent must monitor the demonstration project for compliance with the performance standards criteria specified in Title 14, Division 7, California Code of Regulations (14 CCR), Section 17683.
- (b) A schedule for conducting the demonstration project must be submitted to the LEA prior to commencement of the study. The schedule should include study initiation and completion dates, a description of the test areas, a list of parameters to be monitored, and approximate measurement time frames.
- (c) A document verifying compliance with the California Environmental Quality Act (CEQA) from the lead public agency (e.g. local planning department) must be submitted prior to commencement of the study. Under Public Resources Code (PRC) Section 21084, demonstration projects may be categorically exempt. In those

cases, a copy of the Notice of Exemption filed with the County Clerk is sufficient. *[LEAs should note that CEQA compliance must be established for both the demonstration project and ongoing use.]*

- (d) The landfill operator must obtain written clearances from the Regional Water Quality Control Board (RWQCB), the local fire department, and any other agencies with authority over the operation of the landfill.
- (e) The operator must demonstrate that an adequate load-checking program is in place to ensure that hazardous or unauthorized wastes are excluded from the green material.
- (f) The LEA shall inspect all on-site green material ADC staging and processing areas to ensure that solid waste landfill operational standards are not violated. *[To prevent decomposition with attendant odor and vector problems, a recommended condition is that shredded green material be used within ten (10) days of receipt and three (3) days of processing unless the demonstration project shows that a longer or shorter storage period is appropriate.]*
- (g) Should the use of shredded green material become impracticable or contribute to conditions hazardous to public health and safety and the environment, the operator must temporarily or completely terminate the project by their own initiative, or at the direction of the LEA. A stockpile of cover soil and earth-moving equipment must be available at all times to ensure immediate response to this requirement. The operator must notify the LEA within seven (7) days if the project is terminated. Reactivation of the project after temporary termination shall occur only after approval by the LEA.
- (h) Operators must maintain fire control measures deemed adequate by the LEA and local fire authority. *[Measures other than item i to be considered should include properly trained fire crews with fire fighting equipment available on-site or within an approved distance from the site. Fire control contingency measures should be included in the demonstration project proposal.]*
- (i) The operator must not allow applied shredded green material cover to remain exposed longer than seven (7) days unless the material is wetted by a water truck to prevent excessive dryness. A wetting agent, as recommended by the local fire department, must be available at the site for addition to a water truck in case of fire. Shredded green material cover must not remain exposed longer than 21 days under any conditions.
- (j) If shredded green material is to be tested in the wet season, the operator must comply with RWQCB's requirements for wet weather use. In the absence of a RWQCB wet weather restriction, the LEA should restrict the testing and use of green material ADC during wet weather periods if there are public health and safety related concerns regarding wet weather use. *[The five approved green material ADC demonstration projects did not require wet weather restrictions and have performed well during wet weather. These sites receive less than 20 inches mean annual precipitation. If a wet weather restriction is deemed necessary, it is recommended that application of green material ADC not occur when there is precipitation, or when there is a forecast of > 40% chance of precipitation within 12 hours of application time in the vicinity of the landfill. This recommendation based on industry standards for foam ADC.]*
- (k) The operator must apply shredded green material to a minimum compacted depth of six (6) inches. Insufficient compaction or coverage is considered a performance failure and a violation of the cover standards under 14 CCR 17682. Shredded green material applied as ADC shall be restricted to a maximum thickness of 12 inches. Excessive working face size shall also be avoided in accordance with 14 CCR 17676.
- (l) The operator must place a minimum of 6 inches of compacted soil over the entire working face at the end of any operating day preceding closed days, unless a site attendant or inspector is present during closed days to initiate corrective action as necessary to meet conditions.

- (m) If violations of performance standard thresholds occur during the demonstration project, the operator should revert to soil cover as specified in 14 CCR 18311.
- (n) The LEA shall prepare brief bimonthly reports (one report every two months) which summarize the data collected (14 CCR 17683) and any other relevant observations. All bimonthly reports must be compiled in the final report at the end the study.
- (o) The final report should address all issues that have arisen during the demonstration project. In addition to a tabulation and analysis of the data, the final report must include conclusions as to the suitability of shredded green material for ongoing use as ADC. If shredded green material is determined to be an acceptable ADC and is proposed for ongoing use by the operator, the approved final report with operational conditions must be compiled as an amendment to the Report of Disposal Site Information (RDSI).

The LEA shall submit to the Board's Closure and Remediation Branch copies of the LEA approval letter and project proposal prior to the start of the demonstration. The LEA approval letter must confirm that the above generic condition will be satisfied. Proposed alternatives to the above conditions must receive a separate approval letter issued by Board staff prior to the start of the demonstration.

At the conclusion of the project, the LEA shall submit to the Board's Closure and Remediation Branch the final report/amended RDSI and the LEA final approval letter with operating conditions. If proposed for ongoing non-experimental use, shredded green material ADC must be reflected in the Solid Waste Facilities Permit (SWFP). Reporting requirements for green material ADC should also be included in SWFP conditions. To determine what, if any, permit action is necessary to authorize ongoing non-experimental use, LEAs should contact Permits Branch staff.

Approval Conditions for Other Waste Derived ADC Projects

Proposals for testing other waste derived materials for ADC including, but not limited to biosolids, treated auto shredder residue, processed materials from mixed solid waste composting facilities, food processing wastes, and treated oil-field wastes shall be submitted by the landfill operator to the Board and LEA for approval on a case-by-case basis pursuant to the Board's "Procedural Guidance for the Evaluation of Alternative Cover," adopted May 17, 1990. Approval of such projects by the Board is delegated to the Deputy Director of the Permitting and Enforcement Division.

Certain waste derived materials used as daily cover soil may be considered equivalent to earthen daily cover and therefore not be subject to site specific demonstration projects for approval. Examples of such materials include contaminated soils (subject to LEA Advisory No.5), dewatered sediment from dredge projects, (subject to LEA Advisory No.5) and processed wood waste fines and soil from sawmill log decks and wood waste landfills. For questions regarding other materials which may be considered equivalent to earthen cover, LEAs should contact Closure and Remediation Branch staff.

Project Monitoring and Duration for Green Material Demonstration Projects

Many LEAs have inquired as to flexibility in monitoring and application of the performance standards of 14 CCR 17683. These performance standards provide an enforceable and objective basis to establish that performance requirements for daily cover are met. They were originally intended for landfills operating in lieu of daily cover; and therefore, interpretation and professional judgement is required in application to ADC demonstration projects.

It is not necessary to use the monitoring frequency specified in 14 CCR 17683 continuously throughout the demonstration if there are no known persistent or suspected threshold violations and as long as monitoring is conducted during a range of representative site conditions. For example, an LEA may choose to monitor performance standards


the full frequencies during one month periods in a given season. Less intensive monitoring frequencies and alternative methods of evaluation may be used at intervening times if there are no known persistent or suspected violations of thresholds.

The duration of the demonstration project need not be one year. Six months has typically been sufficient for demonstrating successful use of green material ADC. Other time frames may be considered but should not exceed one year. The operator may also be allowed, on a case-by-case basis, a specified one time extension of the demonstration for technically supportable reasons, as approved by the LEA.

The approval conditions described above are not intended to limit the LEA from exercising its authority under State or local law to impose additional or more stringent requirements on landfills that use shredded green material or other waste derived materials as daily cover.

If you have any questions or need additional information, please call Scott Walker at (916) 255-1198.

Sincerely,


Douglas Okumura
Deputy Director
Permitting and Enforcement Division

Attachment: CIWMB Alternative Daily Cover Motion Adopted January 25, 1995

For back copies of the LEA Advisory call (916) 255-2287

(LEA Advisory # 1, Oct. 6, 1992, Asbestos Containing Waste Disposal)
(LEA Advisory # 2, Feb. 17, 1993, 1992 Legislation Impacts Existing Waste Programs)
(LEA Advisory # 3, June 10, 1993, Site investigation Process for Investigating Closed, Illegal, and Abandoned Disposal Site's)
(LEA Advisory # 4, Sept. 23, 1993, Permitting of Fuel Contaminated Soils Treatment/Processing Facilities)
(LEA Advisory # 5, Dec. 15, 1993, Use of Non Hazardous Contaminated Soil as Daily Cover)
(LEA Advisory # 6, Dec. 16, 1993, Aspergillus, Aspergillosis, and Composting Operations in California)
(LEA Advisory # 7, Dec. 30, 1993, Subtitle D Questions and Answers)
(LEA Advisory # 8, June 24, 1994, General Guidance for Implementing AB 1220 in the Regulation of Solid Waste Disposal Sites, REVISED)
(LEA Advisory # 9, Feb. 10, 1994, Solid Waste Ranking System User Guide: Site Investigation Process (SIP) Part II)
(LEA Advisory #10, Mar. 17, 1994, Procedural Change in Approving Alternative Cover Demonstration Projects Using Geosynthetic Blankets)
(LEA Advisory #11, Mar. 24, 1994, Metallic Discards Management)
(LEA Advisory #12, Mar. 29, 1994, Permitting of Non-Traditional Facilities)
(LEA Advisory #13, May 17, 1994, Wood Waste Landfills)
(LEA Advisory #14, May 25, 1994, Revised Policy and Procedures for Maintaining the Inventory of Solid Waste Facilities Which Violate State Minimum Standards)
(LEA Advisory # 15, June 8, 1994, Completion of Solid Waste Information System Inspection Reports for Disposal Sites and Transfer Stations)
(LEA Advisory #16, September 26, 1994, Clean Closure)
(LEA Advisory #17, September 26, 1994, Nuisance Dumping)
(LEA Advisory #18, October 13, 1994, Permitting and Enforcement at Composting Facilities)
(LEA Advisory #19, May 15, 1995, Streamlining the Approval of Alternative Daily Cover Demonstration Projects Using Green Material REVISED)
(LEA Advisory #20, January 23, 1995, 1995 Inspection Guidance for Solid Waste Facilities)
(LEA Advisory #21, February 17, 1995, Format for Permit Review Reports)